

# Titanis 2.4 GHz Swivel SMA Antenna

Product Specification

## 1 Features

- Designed for 2.4 GHz applications [Bluetooth™, WiFi™ (802.11b/g), Zigbee™, WiMedia™ etc.]
- Also available as reversed thread (left) to meet FCC regulation part 15
- Intended for SMA mounting
- Supplied in bulk

## 2 Description

The Titanis antenna is intended for use with all 2.4 GHz applications. The antenna is fitted with an SMA male connector and a blade, made of a flexible material that can be rotated 360 degrees. No external matching net is required.

Titanis is available as standard SMA and reversed thread SMA.

## 3 Application

- Development tools
- Test equipment
- Instruments
- Access points and gateways
- Printers



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## 4 Model name

20 10 Bxxxx - 01



## 5 General data

Product Name	Titanis 2.4 GHz
Article No.	2010B4844-01 (Standard)
	2010B6090-01 (Reverse thread)
Frequency	2.4-2.5 GHz
Polarization	Linear
Operating temperature	-40 to + 85 degC
Impedance	50 Ohm
Weight	7.4 gram
Antenna type	Swivel

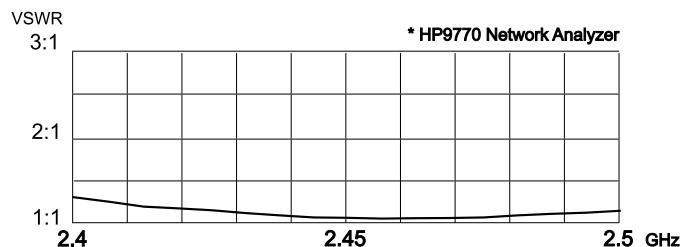
## 6 Electrical characteristics

	Characteristics			Conditions*
	Min	Typ	Max	
Peak Gain	4.0 dBi	4.1 dBi	4.4 dBi	Frequency 2.4-2.5 GHz, Measured in 3D chamber ( near field)
Efficiency	80%	85%	90%	
VSWR	1.1:1	1.2:1	1.3:1	Frequency 2.4-2.5 GHz, Measured in Network Analyzer

\*Note all data provided in this table are based on the Antenova reference board

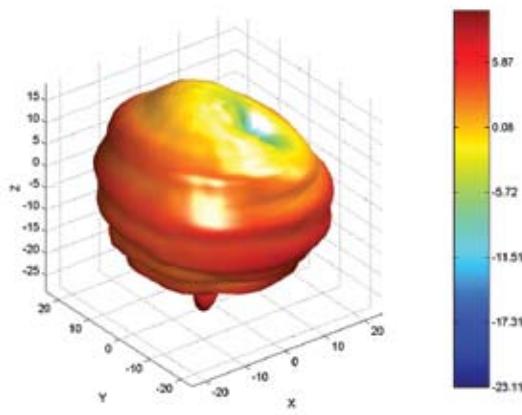
## 7 Electrical performance

### 7.1 Voltage Standing Wave Ratio

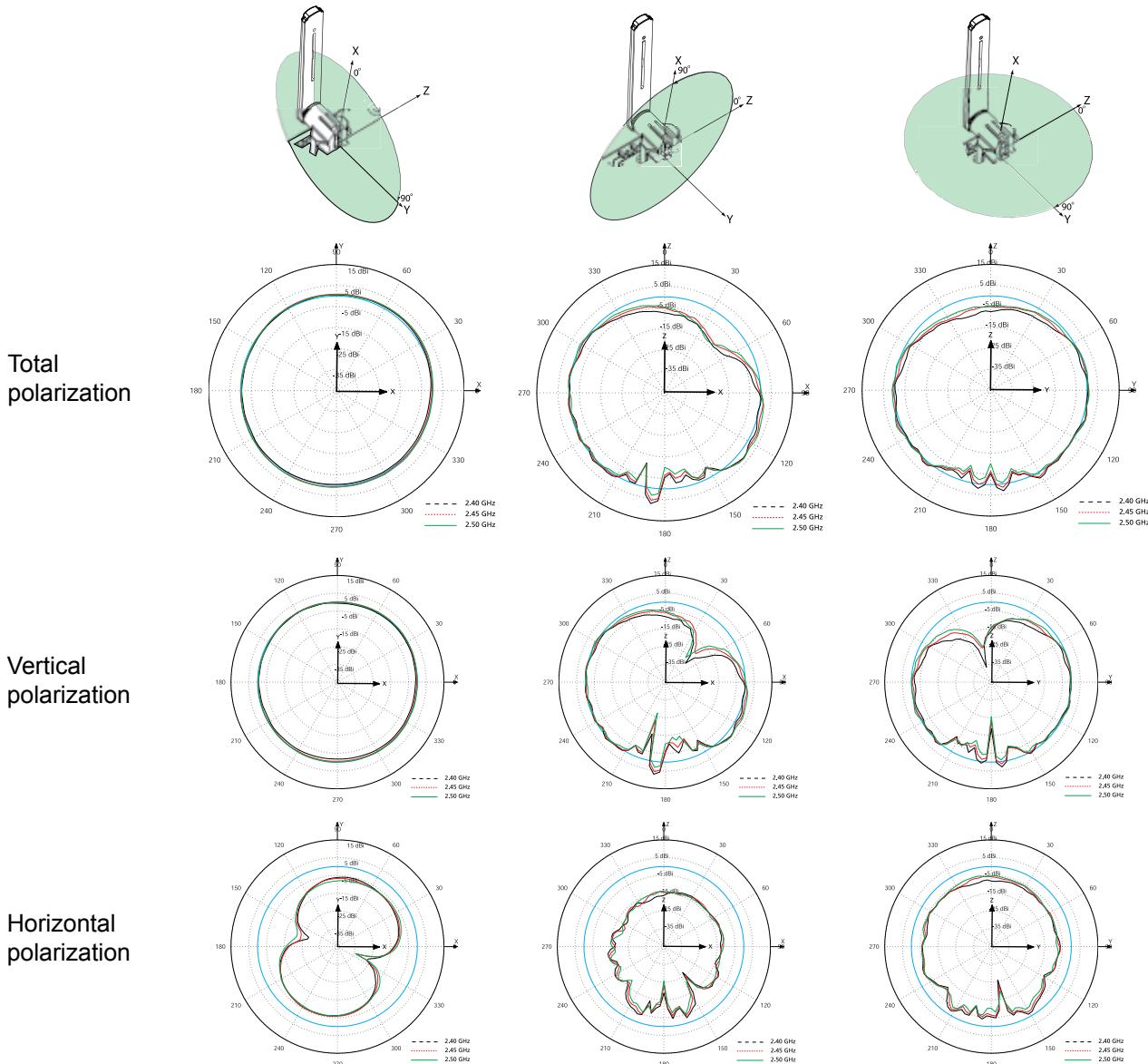


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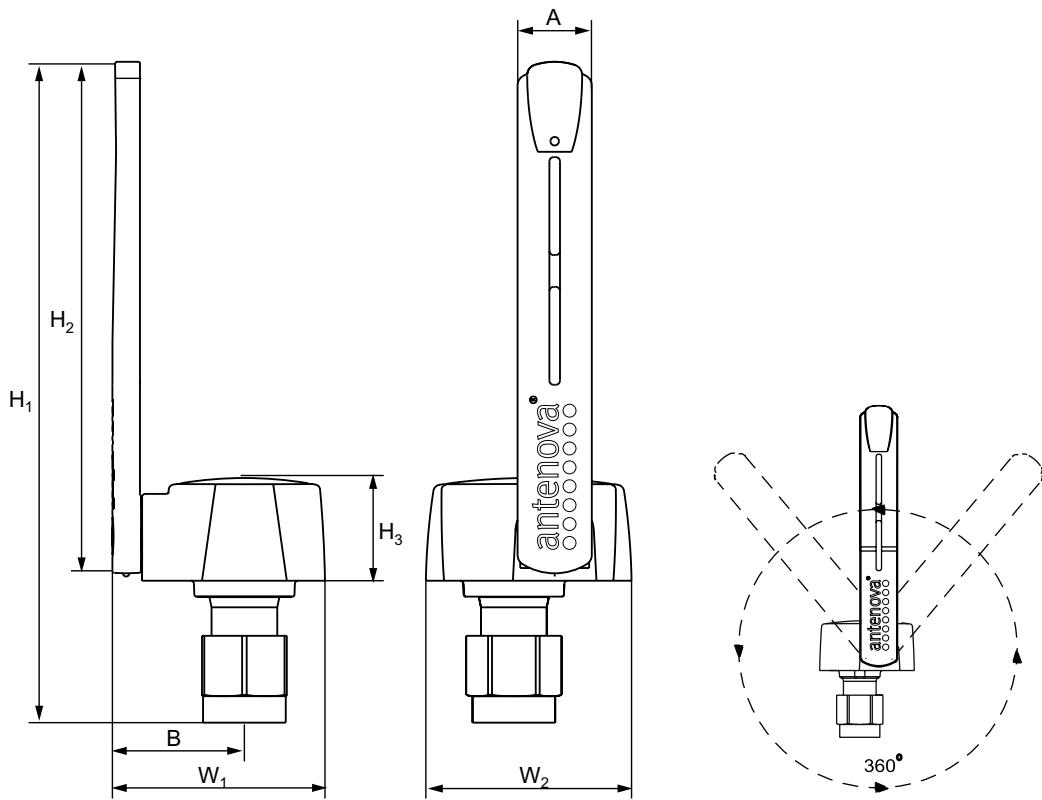
## 7.2 3D-Radiation



## 7.3 Radiation patterns



## 8 Antenna Dimensions



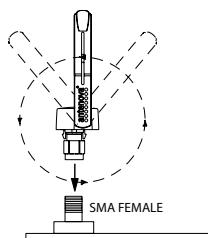
A	B	H1	H2	H3	W1	W2
		Height	Height	Height	Width	Width
7±0.2	12.5±0.5	62.5 ±0.5	48.3 ±0.5	9.5±0.5	20±0.3	19.5±0.3

Dimensions in millimeters

## 9 Electrical interface

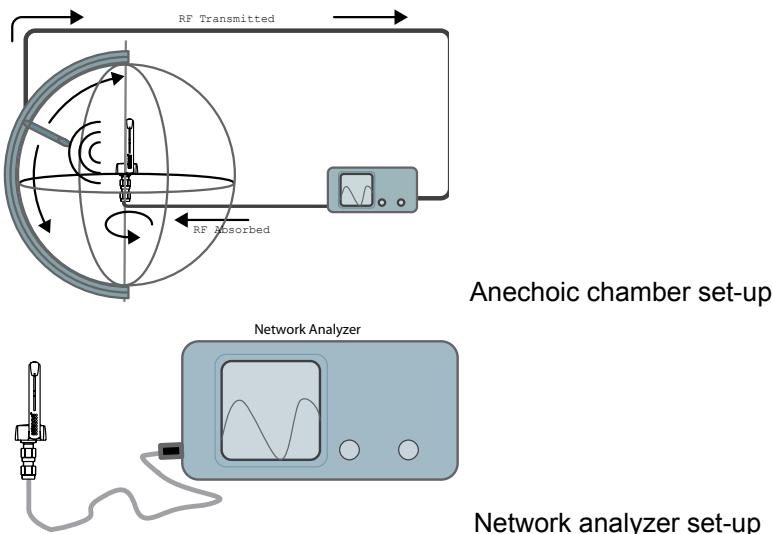
### 9.1 Connection

Titanis is fitted with an internal matching net. Connect the antenna directly to an SMA Female connector.



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## 9.2 Electrical performance test set-up



## 10 Reliability

### 10.1 Temperature and Humidity

Item	Standard	Low	High	Duration
Operating temperature	EN/IEC 60068-2-2, Test Bd: Dry heat	-30 degC	+90 degC	-
Temperature cycling	EN/IEC 60068-2-14, Test Na: Change of temperature	-40 degC	+90 degC	500 cycles / 10 min
Storage life Humidity	EN/IEC 60068-2-1, Test Ca: Damp heat	+60 degC / 90% RH		500 h
Storage life Low temperature	EN/IEC 60068-2-1, Test Ad: Cold	-55 degC	-	500 h
Storage life High temperature	EN/IEC 60068-2-2, Test Bb: Dry heat	-	+125 degC	500 h

### 10.2 Judgement standard

The judgement of the above tests should be made as follows:

1. Visual inspection - Normal appearance with no obvious cracking, peeling-off.
2. Electrical inspection - The antenna satisfies the VSWR specification throughout the 2.4-2.5 GHz band

## 11 Hazardous Material Regulation Conformance

Cadmium and cadmium compound.	Lead and lead compound
Organic brominated compound (PBB, PBDE)	Mercury and mercury compound
Polychlorinated biphenyl (PCB)	Sexivalent chrome compound
Polychlorinated naphthalene (PCN)	Chlorinated paraffin (CP)
Organic tin compound	Mirex
Asbestos	Formaldehyde
Azo compound	Tetra-bromo-bisphenol-A-bis (TBBP-A-bis)

## 12 Packaging

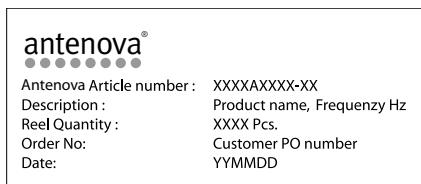
### 12.1 Shelf storage recommendation

Temperature	-10 to +40 degree C
Humidity	Less than 75% RH
Shelf Life	48 Months
Storage place	Away from corrosive gas and direct sunlight

### 12.2 Packaging characteristics

The antennas are delivered in bulk enclosed in plastic bags

### 12.3 Bag label information





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